

# METHOD AND SYSTEM FOR LOW DOSE IMAGE SIMULATION FOR IMAGING SYSTEMS

## Abstract of Disclosure

A method for generating a simulated patient image is disclosed. In an exemplary embodiment, the method includes obtaining image data from an actual patient image and generating simulated noise data. The image data is then combined with the simulated noise data to create the simulated patient image. In one aspect, scan data from the actual patient image is combined with the generated simulated noise data to create pre-image data, and the pre-image data is then reconstructed to create simulated image data. In another aspect, a set of individual noise pattern images for each a plurality of phantom objects is created. At least one of the individual noise pattern images is selected for combination with the actual patient image. The at least one selected individual noise pattern image is then combined with the actual patient image, thereby creating the simulated patient image.

## Figures